Appl. No. 09/705,105
Response mailed November 1, 2007
Reply to Final Office Action, mailed date August 1, 2007

Docket No. SIG000053

REMARKS

Claims 1-46 are pending in the application.

Claims 1-46 have been rejected.

Claims 1 and 19 have been amended, as indicated above, to correct minor informalities.

No new matter has been added.

Reconsideration of the Claims is respectfully requested.

In general, it appears that a rejection has not been tendered to each and every claim pending for examination before the Patent Office. For example, claims 5, 7, and 36 have not been cited for a basis of rejection with respect to either of the rejections asserted in the Final Office Action. If such is the case, Applicant respectfully requests an indication of allowance or allowability as to these claims.

### 1. Rejection under Section 112

Claim 1 was rejected under 35 U.S.C. 112, ¶ 2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has made an appropriate amendment to Claim 1.

2. Rejection under Section 103

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142, p. 2100-125 (Rev. 5, August 2006) (citations omitted).

Claims 1-4, 6, 9, 10, 12-15, 17-19, 21, 24, 26, 27, 29, 31-33, 35, 38, 40-43, 45 and 46 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,420,739 to Yokozawa ("Yokozawa")) in view of U.S. Patent 4,442,540 to Allen ("Allen").

Claims 8, 11, 16, 23, 25, 30, 37, 39 and 44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yokozawa in view of Allen and in further view of U.S. Patent 6,850,555 to Barclay ("Barclay").

Yokozawa relates to "provide a remote control for a portable audio device that eliminates redundant control and display elements." (Yokozawa 2:7-9). To this end, Yokozawa recites "a portable audio unit has a main unit, such as a CD player or tape recorder[, which is] connected to a control unit by a cable. Audio and control signals are transmitted by the cable. The control unit has a connector for an earphone. Audio signals are transmitted by the cable from the main unit, to the control unit and to a connected earphone. Control signals are transmitted from the control unit to the main unit for controlling functions such as volume, power, tape-play, etc." (Yokozawa 2:13-22). Figure 1 of Yokozawa depicts this device:


FIG. 1
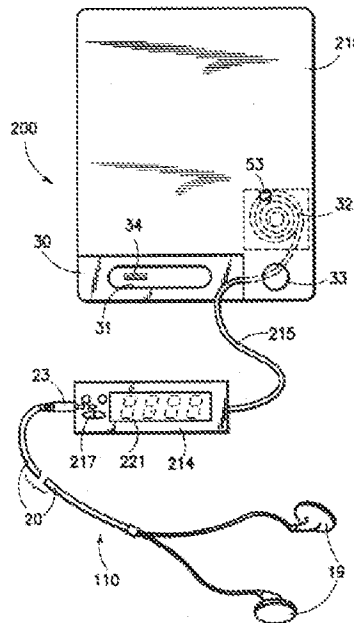
With respect to its Figure 1, Yokozawa recites a "portable audio device, shown generally at 200, such as a CD player or tape recorder, has a main unit 210 containing electrical and mechanical components (not shown) for playing tapes or CDs. *A remote control unit 214 controls main unit 210. An audio/control cable 215 feeds control signals from remote control unit 214 to main unit 210. Audio signals from main unit 210 are fed through audio/control cable 215, through remote*

control unit 214, to an earphone set 110. Earphone set 110 is connectable to, and disconnectable from, remote control unit 214 by a first plug 23." (Yokozawa 4:39-49) (emphasis added).

As such, Yokozawa recites a portable audio device that includes three components: the remote control unit 214, the main unit 210, and the earphone set 110, where the remote control unit provides controls signals to the main unit and where the earphone set receives audio signals from the main unit. Yokozawa does not, however, recite processing data received from an external content display device to produce presentation information and processing content data for presentation on the external content display device based on the presentation information as is recited in Applicant's claim 1.

The Office Action had improperly analogizes the acoustic transducer earphones 110 to be akin to the data processing circuitry of the claimed invention; has equated the remote control device 214 to the external content display device; and has equated the content processing module to the main unit 210. As shown in Figure 2 (set forth below) of Applicant's Specification, the content processing module, the transceiving module, and the data processing circuitry are within the content processing device, which is coupled via a channel to a content display device.

Allen relates to economical use of transmission facilities by reducing "use [of] the full frequency transmission bandwidth to transmit data and voice signals over the same transmission channel. . . . [S]peech and data signals are transmitted simultaneously. This embodiment [of Allen] comprises circuitry for converting the analog speech signal into digital form." (Allen 2:30-46). Figure 1 of Allen depicts its "speech interpolation apparatus:"


FIG. 1
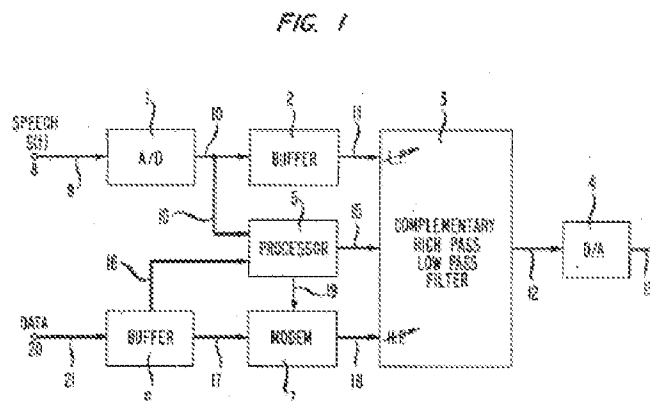
Allen recites that "[t]he apparatus comprises an analog-to-digital (A/D) converter 1 for changing the speech signal from analog to digital form; buffers 2 and 6 for holding the digital speech and

data signals, respectively; processor 5 for generating control signals in response to both speech and data signals; *modem 7 for modulating the data signal above the speech signal; time-varying complementary high-pass, low-pass (HP-LP) filter 3 for operating in response to control signals from processor 5 on speech and data signals, respectively*, from buffer 2 and modem 7; and digital-to-analog (D/A) converter 4 for changing the digital speech and data signals into analog form with the speech signal in a lower segment of the channel bandwidth and with the data signal in an upper segment thereof." (Allen 3:26-42) (emphasis added).

Also, Allen recites that the speech interpolation device "can be characterized as a variable frequency interpolation system *in which not only silent intervals in the time domain are used to advantage but also where the speech signal occupies less than full bandwidth in the frequency domain data are inserted into momentarily unused and expandable frequency space above that needed for the speech signal alone.*" (Allen 4:23-29) (emphasis added).

As understood, Allen recites a system for limiting the bandwidth of speech signals and determining silent intervals of the speech signals *to insert data signals*. Allan *does not*, however, recite separating modulated data from the content data, retrieving the data from the modulated data, and introducing the content data into a channel coupling the device to the external content display device.

In contrast, Applicant's Specification sets forth "a method and apparatus for processing content data . . . that begins by receiving modulated data via a channel that couples a content display device to a content processing device. The processing continues by introducing the content data onto the channel and *separating the modulated data from the content data*. The processing then continues by *retrieving data* from the modulated data, wherein the content display device modulates the modulated data. The processing continues by processing the data to produce *presentation information* (e.g., volume adjust). The processing then continues by processing the content data for presentation on the external content display device based on the presentation information (e.g., providing stereo audio signals to headphones at the adjusted volume level). *With such a method and apparatus, remote control data, audio data, video data, text data and/or multi-media data may be transceived between a content processing device and a content display device utilizing a minimal number of interconnections.*" (Specification at page 5, *ll.* 3-16) (emphasis added). Applicant's Figure 2 "illustrates a schematic block diagram of a content processing device and content display device . . . . :"

FIG. 2
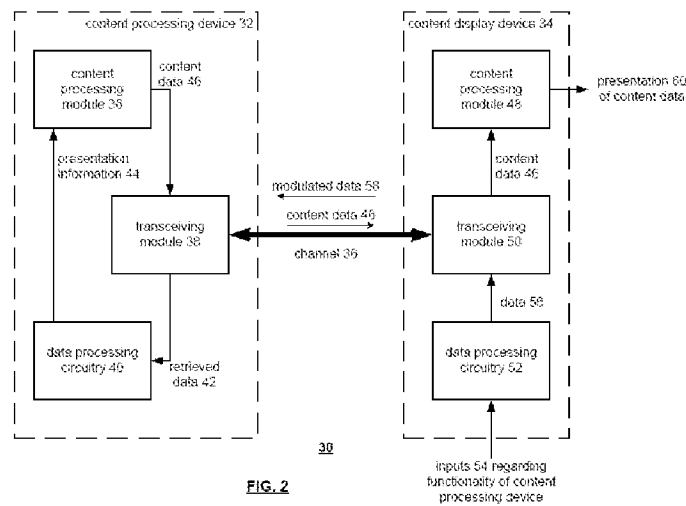
As explained in the Applicant's Specification, "[t]he content processing device 32 may be any device that produces audio data, video data, text data, multi-media data, and/or a combination thereof for presentation to a user. The content display device 34 may be a headphone, LCD panel, plasma display, speakers, and/or any device that allows for audio data, video data, text data, multi-media data, and/or a combination thereof to be presented to a user." (Specification at page 5, *ll.* 19-24).

In kind, Applicant's Independent Claim 1 recites, *inter alia*, a "device for processing content data, the device comprises: *data processing circuitry* operably coupled to process data received from an external content display device, wherein the data processing circuitry produces presentation information from the received data; *content processing module* operably coupled to process content data based on the presentation information for presentation on the external content display device; and *transceiving module* operably coupled to the data processing circuitry and the content processing module, wherein the transceiving module *separates modulated data from the content data and retrieves the received data from the modulated data of the external content display device*, and wherein the transceiving module *introduces the content data into a channel coupling the device to the external content display device*." (emphasis added).

Applicant's Independent Claim 14 recites, *inter alia*, a "device for processing content data, the device comprises: *data processing circuitry* operably coupled to provide display data to an external content display device; *content processing module* operably coupled to process content data for presentation on the external content display device; and *transceiving module* operably

15

coupled to the data processing circuitry and the content processing module, wherein the transceiving module *combines the display data and the content data to produce transmit data*, wherein the transceiving module *provides the transmit data to the external content display device via a channel* coupling the device to the external content display device." (emphasis added).

Applicant's Independent Claim 19 recites, *inter alia*, a "method for processing content data, the method comprises the steps of: *receiving modulated data* via a channel coupled to an external content display device; introducing the *content data* into the channel coupling the device to the external content display device; separating the modulated data from the content data; retrieving data from the modulated data; *processing the retrieved data to produce presentation information*; and *processing the content data for presentation* on the external content display device based on the presentation information." (emphasis added).

Applicant's Independent Claim 33 recites, *inter alia*, a "device for processing content data, the device comprises: . . . memory operably coupled to the processing module, wherein the memory includes operational instructions that cause the processing module to: receive modulated data via a channel coupled to an external content display device; introduce the content data into the channel coupling the device to the external content display device; separate the modulated data from the content data; retrieve data from the modulated data; process the data to produce processed data to produce presentation information; and process content data for presentation on the external content display device based on the presentation information." (emphasis added).

Applicant's Independent Claim 42 recites, *inter alia*, a "device for processing content data, the device comprises: . . . memory operably coupled to the processing module, wherein the memory includes operational instructions that cause the processing module to: provide display data to an external content display device; process content data for presentation on the external content display device; modulate the display data to produce modulated display data; combine the modulated display data and the content data to produce transmit data; and provide the transmit data to the external content display device via a channel coupling the device to the external content display device." (emphasis added)

Applicant respectfully submits that a *prima facie* showing has not been established. There is no suggestion or motivation to modify the retractable cord audio device of Yokozawa with the bandwidth reduction transmission facility of Allen to achieve Applicant's claimed invention as set out in its claims. Further, Applicant respectfully submits, in view of the disparate operations

pointed out above in the cited references, that the cited references *do not* teach or suggest all of Applicant's claim limitations.

Further, the Office Action took "official notice that it is notoriously well known to implement methods such as the ones disclosed in Applicant's claims 1, 14, 19, and 28 on a programmable processor." (Final Office Action at page 6). Applicant objects to the improper generalization of it being "notoriously well known to implement methods such as the ones disclosed in Applicant's claims . . ." in view of the fact that documentary evidence has not been presented by the Examiner substantiation such a conclusion as a *prima facie* showing of obviousness has not been presented, as set forth above.

Notably, Official Notice without documentary evidence to support an examiner's conclusion is permissible *only in some circumstances*. MPEP § 2144.03 at page 2100-134. In context, Official Notice is for facts asserted to be well-known, or to be common knowledge in the art that are capable of instant and unquestionable demonstration as being well-known. Further, such a device should be rare when an application is under final rejection. *Id.*

Claims 8, 11, 16, 23, 25, 30, 37, 39 and 44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yokozawa in view of Allen and in further view of U.S. Patent 6,850,555 to Barclay ("Barclay").

Claims 8 and 11 depend directly or indirectly from Independent Claim 1. Claim 16 depends from Independent Claim 14. Claims 23 and 25 depend indirectly from Independent Claim 19. Claim 30 depends from Independent Claim 28. Claims 37 and 39 depend indirectly from Independent Claim 33. Claim 44 depends from Independent Claim 42. In that dependent claims are "construed to incorporate by reference all the limitations of the claim to which [they refer]," 35 U.S.C. § 112, ¶ 4, the addition of Barclay to the hypothetical combination of Yokozawa and Allen does not cure the lack of a *prima facie* showing of obviousness.

Barclay relates to a "signaling system . . . that is provided . . . to update the prices of goods which are electronically displayed on supermarket shelves." (Barclay 1:16-17). Applicant respectfully submits that there is no suggestion or motivation for the addition to the hypothetical combination of Yokozawa and Allen.

17

3. Conclusion

As a result of the foregoing, the Applicant respectfully submits that Claims 1-46 in the application are in condition for allowance, and respectfully requests allowance of such claims.

If any issues arise, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *ksmith@texaspatents.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to SigmaTel Deposit Account No. 50-1415.

Respectfully submitted,

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